



ALPHEUS

Dark Fiber: Promoting Facilities Based Competition

November 5, 2004



(formerly)
el paso Networks

Poster Child for the Innovation and Investment Intended by the Act

- Unbundled access to dark fiber stimulates investment in facilities and equipment.
- There can be no “arbitrage” with dark fiber; it is an idle raw material that requires investment and expertise to utilize.
- Dark fiber unbundling adds new capacity to local transport market.
- Neither financial markets nor municipalities will allow each company to lay separate fiber down every street.
- Dormant legacy facilities the ILEC is unlikely to ever use.

Encouraging a Competitive Market

- Post legal monopoly, complete vertical integration is economically unrealistic:
 - healthy competitive ecosystem will require horizontal specialization.
 - need efficient wholesale providers so retailers can compete.
- As UNE-P goes away, dark fiber is crucial in enabling the transition to facilities-based competition.
- Re-affirm TRO findings on common carriage.

Alpheus Business Model

- Over \$300MM spent to overlay legacy infrastructure efficiently.
- Alpheus never wants to be an involuntary tenant; we are a walking-talking impairment test.
- Preference is to deploy our own fiber; where financial metrics do not allow and alternatives do not exist, Alpheus still needs certain UNEs for transport.
- ***No special access offering for dark fiber.***
- Consequence of loss of impairment is not incremental cost, it is physical network disruption.
- No claim to greenfield fiber (deployed post-effective date)

Progressive Transition to Facilities Based Competition

- Carriers who are found to be unimpaired without access to DS3 can purchase and deploy equipment, utilizing UNE dark fiber.
- Carriers who are found to be unimpaired without access to Dark Fiber Transport can build if roped and rodded duct is available within a year.
- If roped and rodded duct is not available, considering the many obstacles to trenching the streets, 48 months is needed for the transition.
- ILEC has choice to eliminate impairment immediately by converting existing UNEs to market-based IRUs.

Dedicated Transport Dark Fiber

Three Tier Impairment Test

- **Tier One**: No impairment between wire centers each having more than 40,000 business access lines.
- **Tier Two**: Impairment subject to TRO triggers on routes between wire centers each having 20,000 to 40,000 business lines.
- **Tier Three**: Conclusive finding of impairment on routes between wire centers below 20,000 business access lines.

Alpheus Impairment Test Cuts Deeply Into The Marketplace

Houston

- Wire centers with 40K or more business lines would result in **removal of transport to wire centers where 52% of the business lines in Houston are located.**
- Wire centers with 20K - 40K business lines could potentially result in removal of transport to wire centers where an **additional 31% of business lines are located.**
- Areas that have a **total of 83% of business lines** in Houston may be subject to findings of non-impairment for UNE transport.

Dallas

- Wire centers with 40K or more business lines would result in **removal of transport to wire centers where 58% of the business lines in Dallas are located.**
- Wire centers between 20K - 40K business lines could potentially result in removal of transport to wire centers where an **additional 18% of business lines are located.**
- Areas that have a **total of 76% of the business lines** in Dallas may be subject to non-impairment findings for UNE transport.

Business Line Counts: Houston and Dallas

HOUSTON

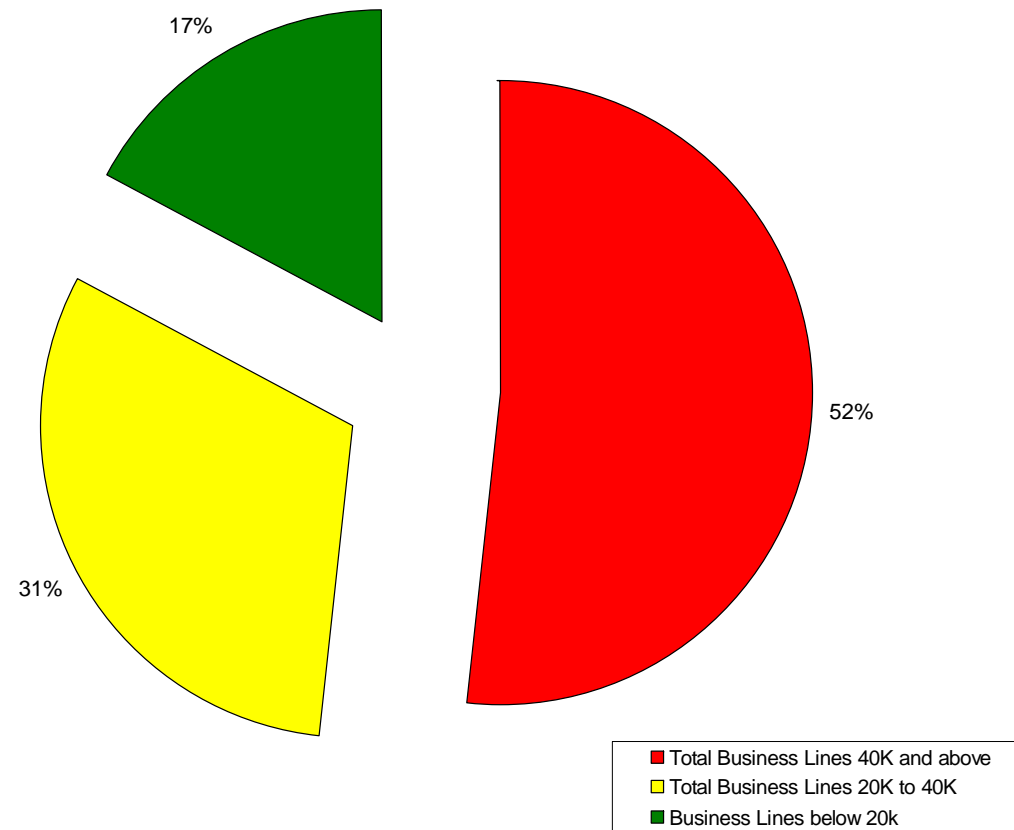
Tier	Number of Business Lines	Percentage of Business Lines
Total Business Lines 40K and above	522,926	52%
Total Business Lines 20K to 40K	315,299	31%
Business Lines below 20k	173,781	17%
Total Business Lines in Houston	1,012,006	100%

DALLAS

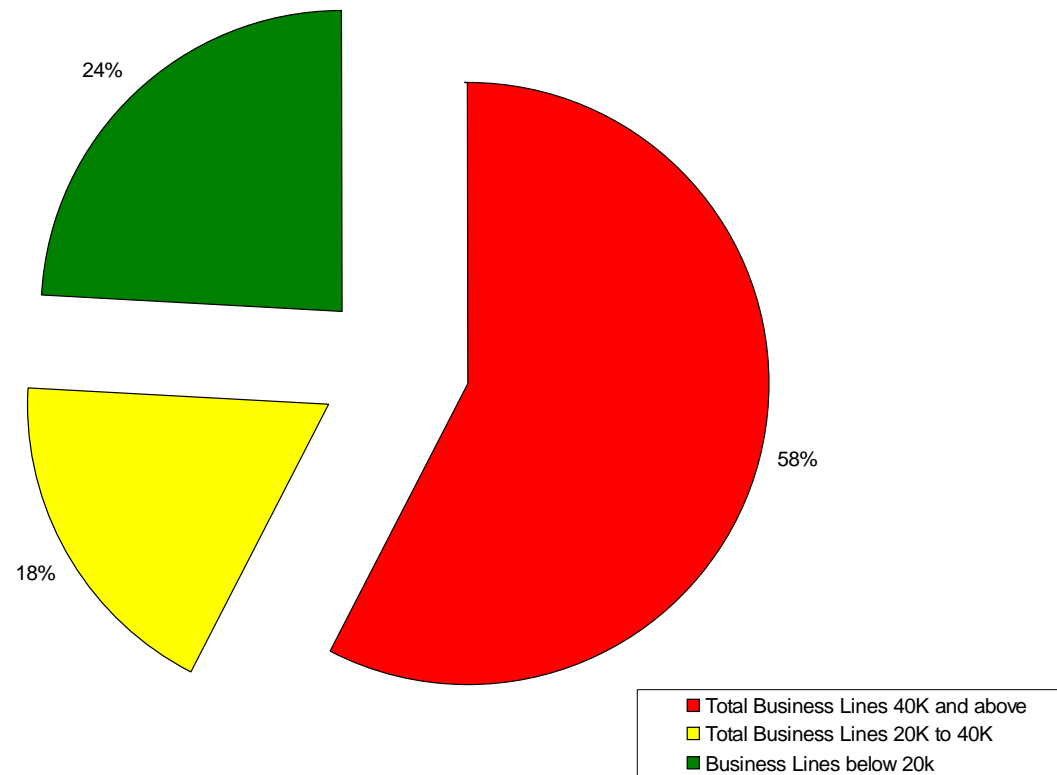
Tier	Number of Business Lines	Percentage of Business Lines
Total Business Lines 40K and above	425,532	58%
Total Business Lines 20K to 40K	136,113	18%
Business Lines below 20k	179,089	24%
Total Business Lines in Dallas	740,734	100%

The Business Line figures in this presentation and Alpheus comments and reply comments use business line estimates generated by PNR Associates developed for the Commission's Universal Service proceedings. See *Federal-State Joint Board on Universal Service, Forward Looking Mechanism for High Cost Support for Non-Rural LECs*, 10th Report & Order, 14 FCC Rcd 20156 par. 51 (1999).

Impact of Alpheus Impairment Test Houston



Impact of Alpheus Impairment Test Dallas



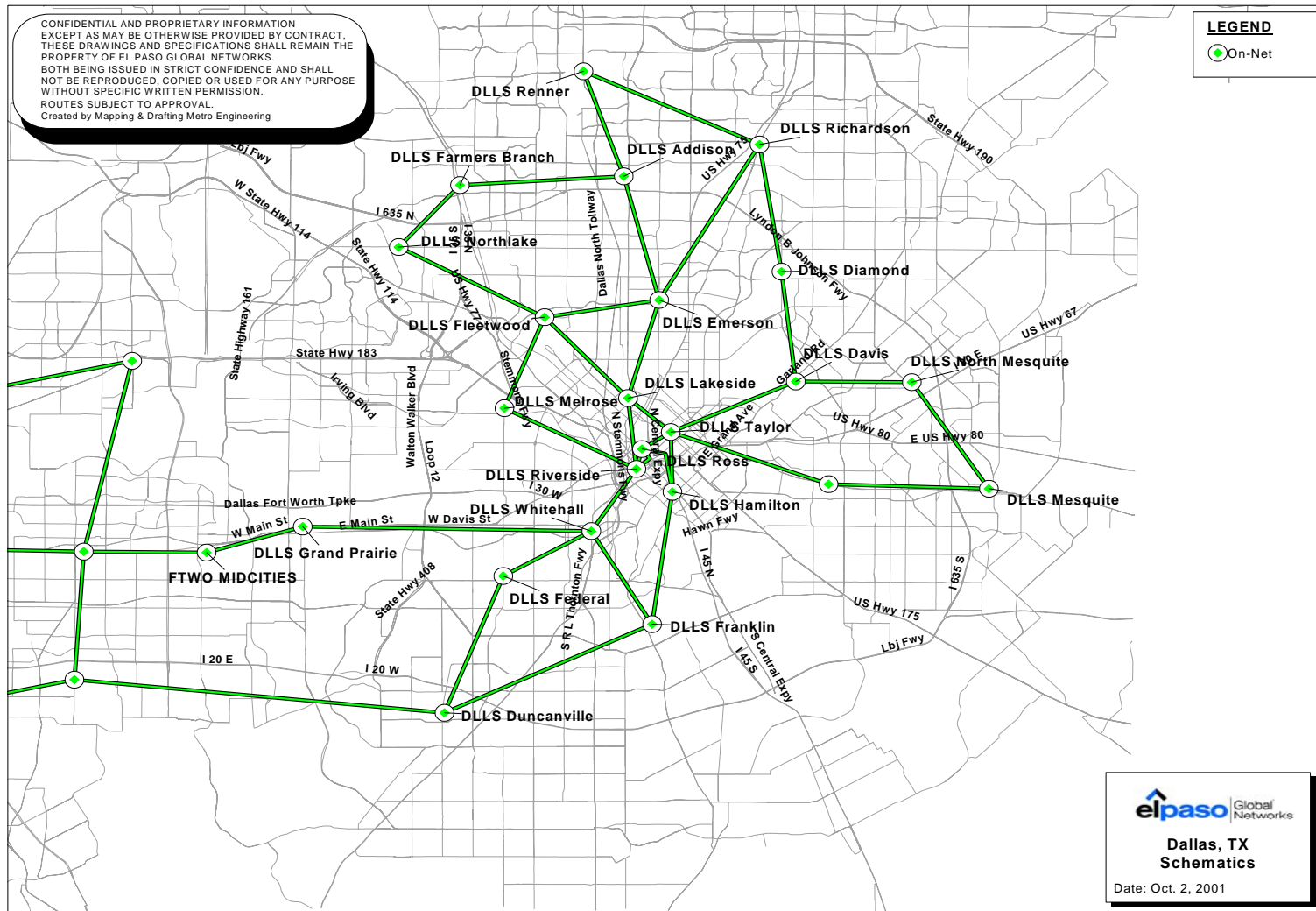
Houston

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LEGEND
◆ On-Net
— Schematic Lines

elPASOs Global Networks
Houston
Area Schematics
Date: Feb 12, 2003

Alpheus' Dallas Network



***Overview of Route Characteristics
Based on Number of Business
Lines In The Wire Centers***

Wire Centers with Less than 6,000 Business Lines

<u>Number of Business Lines</u>	<u>Total Lines</u>	<u>Residential Lines</u>	<u>Special Access Lines</u>	<u>Population Density</u>	<u>Alpheus Collocation</u>
Less than 6,000 business lines.	Total lines below 20,000	Number of Residential lines generally double number of business lines	Special access lines below 4,000	Low population density; few, if any, high rise buildings; Geographically larger	Doesn't justify collocation

Wire Centers With 6,000 - 20,000 Business Lines

<u>Number of Business Lines</u>	<u>Total Lines</u>	<u>Residential Lines</u>	<u>Special Access Lines</u>	<u>Population Density</u>	<u>Alpheus Collocation</u>
Between 6,000 and 20,000	Between 20,000 and 55,000 total lines	Residential lines significantly outnumber business lines	Special access lines between 4,000-12,000	Medium to Large residential population density; No cluster of high- rise buildings; Geographically larger	Justifies collocation but not self provisioning

Wire Centers With 20,000 - 40,000 Business Lines

<u>Number of Business Lines</u>	<u>Total Lines</u>	<u>Residential Line</u>	<u>Special Access Lines</u>	<u>Population Density</u>	<u>Alpheus Collocation</u>
Between 20,000 and 40,000 business lines . .	Between 48,000 and 95,000	Residential lines could be significantly more, significantly less or equal to business lines	Special access between 15,000 to 23,000. Special access lines could be higher than residential, the same or lower.	Could be medium to large residential, or almost completely business, Could be large geographic wire center or a small geographic wire center with high concentration of high-rise buildings	Justifies collocation; justification for self-provisioning requires case- by-case analysis

Wire Centers with More Than 40,000 Business Lines

<u>Number of Business Lines</u>	<u>Total Lines</u>	<u>Residential Lines</u>	<u>Special Access Lines</u>	<u>Population Density</u>	<u>Alpheus Collocation</u>
Above 40,000 business lines	Above 75,000	More business lines than residential, usually by significant number.	Over 29,000; typically exceeds number of residential lines.	Very high-density markets with clusters of central business districts	Justifies collocation and often self- provisioning.

Overview of Fiber Build Options

<u>Type of Area</u>	<u>SBC Duct</u>	<u>Trenching in Street</u>	<u>Direct Buried or Aerial</u>	<u>Addressable Market</u>
Central Business District	Most ducts available but older and often unusable.	Due to high construction costs, moratoriums, and restrictions make this very difficult, if not impossible to accomplish	There are generally no poles in the core business districts. Direct Buried is not possible.	Most dense
10 to 20 miles Outside CBD.	Very little duct available	Cost to trench generally lessens, rights-of-way less congested	Still older parts of the city where direct buried would not be permissible. Spotted pole runs.	Medium density market. Mix of residential and small to medium business
Outside City	Duct typically not available because fiber is direct buried fiber	Not necessary to trench in street as large expanses of rights-of-way.	Can frequently direct bury or place aerially	Low population density

Dark Fiber Loops

CLECs, in light of the overwhelming evidence from the TRO cases, are impaired on a national basis for dark fiber loops. If any decision otherwise, a location by location analysis must be done because of building access, street moratoriums, and duct availability.

Policy Considerations

- ILECs refuse to make fiber available on any terms...refuse to participate in this wholesale market.
- Motive to hoard dormant fiber: Inhibit Facilities Based Competitionturning away very profitable business in order to retain broadband infrastructure is anti-competitive on its face.
- Restraint of trade in idle facilities is a naked abuse of market power.
- Transition process for UNE dark fiber must account for availability of ILEC conduit.
- Eliminating UNE fiber rents will put upward pressure on ILEC consumer rates.
- Stranding rate-payer financed infrastructure is economic waste.